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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/636,069	04/22/1996	GURTEJ S. SANDHU	MICR155(95-0	2399
21186	7590	01/27/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			KIELIN, ERIK J	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	08/636,069		SANDHU ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Erik Kielin		2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,31,33-36 and 38-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,31,33-36 and 38-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In view of the Reply Brief filed on 5 November 2004, PROSECUTION IS HEREBY REOPENED. A rebuttal to the Reply Brief is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections under 35 USC § 112, § 102, and § 103***

2. The rejections of the claims as presented in the Examiner's Answer filed 1 September 2004 are incorporated herein in their entirety and are not repeated here for brevity.

### ***Response to Arguments.***

Appellant argues on pp. 2-3 of the Reply Brief under the section entitled "(1) Claims 1, 2, 4-6, 31, 33-36, and 38-54 Meet the Requirements under 35 U.S.C. § 112, First Paragraph Enablement",

"The Answer on page 4 substantially repeats the rejection of the Final Office Action and then relies on *New Railhead Manufacturing LLC v. Vermeer Manufacturing Co.*, 63 USPQ2d 1843 (CAFC 2002), and asserts: 'In the instant case, one of ordinary skill has not been reasonably

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apprised that Appellant was in any manner in possession of *indirect* illumination of the substrate surface.’ (emphasis in original).”

“Appellant repeats the traversals of the Appeal Brief which are hereby incorporated by reference to support a finding that the specification does indeed teach the recited subject matter. As for the *New Railhead* argument, Appellant respectfully submits that one of skill in the art would have been able to understand the recited subject matter based on the application as filed. The assertion appears to be another form of official notice and is unsupported by affidavit or other documentation. Furthermore, without admitting the assertion, but only for the sake of argument, it is respectfully submitted that one of skill in the art would appreciate that a substrate could be illuminated without directly exposing the substrate to a light source. Thus, Appellant respectfully repeats the traversals of record and submits that the specification does support the claim language of claims 1, 2, 4-6, 31, 33-36, and 38-54. Thus the rejection should be reconsidered and withdrawn.”

Appellant appears to be of the opinion that Examiner has somehow given Official Notice that “one of ordinary skill has not been reasonably apprised that Appellant was in any manner in possession of *indirect* illumination of the substrate surface.” Official Notice is statement presented without evidence that can be unquestionably verified. Examiner has not done this. Rather Examiner has presented evidence, as set forth in the rejection of the claims. Accordingly, no official notice was given.

Regarding Appellant's conclusory observation that one of ordinary skill would be able to and would somehow know to use “indirect illumination” is without merit as there exists no such disclosure to this. Rather the claims as amended numerous times stretch beyond the scope presented in the original four corners of the disclosure.

Further in this regard, MPEP 1206 at page 1200-14, the form paragraph 12.76.02 states

“The brief does not contain, for each rejection under 35 U.S.C. 112, (first paragraph), an argument which specifies errors in the rejection and how the first paragraph of 35 U.S.C. 112 is complied with, including how the

specification and drawings, if any, enable any person skilled in the art to make and use the subject matter defined by each of the rejected claims.”

Accordingly, the argument presented above is defective for failing to show “how the specification and drawings, if any, enable any person skilled in the art to make and use the subject matter defined by each of the rejected claims.” Examiner respectfully submits that, absent such showing or other evidence, Appellant's argument amounts to a mere pleading the the claims are enabled for “indirect illumination.”

Appellant submits no additional arguments on p. 3 of the Reply Brief under the section entitled “(2) Claims 45 and 50 Meet the Requirements under 35 U.S.C. § 112, First Paragraph Enablement.” Accordingly, there exists nothing to rebut.

Applicant argues, in pertinent parts on pp. 4-5 of the Reply Brief under the section entitled, “(3) Claims 1, 2, 4-6, 31, 33-36, and 38-54 Meet the Requirements under 35 U.S.C. 4 112, First Paragraph Enablement.

“... Appellant notes that the Answer includes a reference to *Durel Corp. v. Osram Sylvania, Inc.*, 256 F.3d 1298, 1306-07 (Fed. Cir. 2001) and to *Enzo Biochem, Inc. v. Calgene*, 188 F.3d 1362, 1374-75 (Fed. Cir. 1999). Appellant notes that the Answer states that they relate to ‘where technology was too unpredictable to ensure that the results as to one cell type would hold as to another.’ Appellant respectfully submits that the Answer appears to be finding the present technology predictable for purposes of rejecting the feasibility of the recited subject matter, yet relies on unpredictability for rejecting the recited subject matter on enablement. As such it is respectfully submitted that the rejections are inconsistent and should be withdrawn. Furthermore, it is respectfully submitted that cell types are not analogous to the technology recited.

“The rejection also relied on *In re Ghiron*, 442 F.2d 985, 991, 169 USPQ 723, 727 (CCPA 1971) for the assertion that the application:

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‘ . . . must provide a sufficient disclosure of the apparatus if the apparatus is not readily available. See also, *In re Gunn*, 537 F.2d 1123, 1128, 190 USPQ 402, 406 (CCPA 1976). No such apparatus is readily available, since the evidence clearly indicates that the claimed method will not work in the presently claimed pressure range of 200 to 760 Torr.’

Appellant respectfully traverses this line of argument as incorrectly assuming that the present subject matter will not work as recited and that the disclosure is not adequate. As such, it is respectfully submitted that these additional arguments be withdrawn for being deficient on their face.”

Appellant argues that the precedent established in the *Durel* and *Enzo* decisions, is not presently applicable because of the type of art addressed in the decisions is not the same as presently claimed. Examiner respectfully disagrees because the general precedent supported in the Federal Circuit decision states that “the specification of the patent **must** teach those skilled in the art how to make and use **the full scope of the claimed invention without undue experimentation.**” Quoting the decision in *Genentech, Inc. v. Novo Nordisk, A/S*. 108 F.3d 1361, 1365 (Fed. Cir. 1997) (emphasis added). It is unclear how Appellant can suggest that enablement exists when Appellant continues to fail to provide evidence from the specification or by affidavit or declaration that the invention is somehow enabled in the pressure range presently claimed. By contrast, Examiner has provided ample evidence that the invention presently claimed will not work in the pressure range of 200 Torr to 760 Torr.

Appellant finally argues that it is somehow an assumption that the instant invention will not work. Examiner respectfully disagrees based upon the **evidence** of record showing that the claimed method will not work, and further based upon Appellant's inability to provide evidence to the contrary. Accordingly, to suggest that it is an assumption is to merely ignore the evidence.

Appellant argues, in pertinent part, in the Reply Brief at p. 4, under the section entitled “(4) Claims 1, 2, 4-6, 31, 33-36, and 38-54 Meet the Requirements under 35 U.S.C. § 112, First Paragraph Written Description,”

“...The Answer then concludes that a certain interpretation would ‘reinstate, *inter alia*, the rejection of the claims over Hisumane alone.’ Appellant respectfully submits that such rejection is improper on several grounds. Appellant respectfully submits that the Office had an opportunity to raise such a rejection by reinstating prosecution after the filing of Appellant's Appeal Brief and declined to do so. Thus, no such rejection is formally made in this matter and the comments of the Answer are improper. Furthermore, the Answer's assumptions about the interpretation of the claim language are incorrect since the claims were amended over the course of prosecution. Appellant is not requesting conflicting interpretations. As such, it is respectfully submitted that review of this application focus on the claims as they currently stand and the arguments set forth for such claims. Appellant respectfully traverses these assertions in light of the claims as currently pending.”

Examiner agrees that no such rejection formally exists, but recognizes that the Board may introduce such ground of rejection if the Board sees fit, based upon the arguments present.

Examiner further submits that no such rejection is necessary since the claims are not enabled.

Accordingly, a rejection under Hisamune is unnecessary until such decision on the enablement of the instant claims is made, which may or may not obviate the reinstatement of prior art rejection over Hisamune alone which is of record but presently withdrawn.

Examiner respectfully submits that the interpretation of the claim language is within the broadest reasonable interpretation of the claim language. Appellant merely suggests it is incorrect without providing reasoning as to why it should be an incorrect interpretation. Accordingly, Applicant's statement is not really an argument, so much as an opinion.

The Reply Brief addresses on p. 5, first paragraph, the non-appealable matter of the drawings. Examiner makes not further comments in this regard.

The Reply Brief at p. 5 through p. 6, first paragraph, indicates that no further arguments are presented with respect to sections (6), (7), (8) and (9). Accordingly, there is nothing for Examiner to rebut.

Beginning on p. 6 of the Reply Brief, Appellant responds to Examiner's Rebuttal of the arguments regarding the Issues. Under the section entitled "ISSUE 1" on p. 6, Appellant presents no arguments and therefore nothing for Examiner to address. Under the section entitled "ISSUE 2" on p. 6, Appellant argues,

"The Answer states that regarding Appellant's issue 2, claims 45 and 50 are not enabled due to the failure to include in the claims specific language regarding an oxygen source. The Answer admits that the open-ended language of comprising does not exclude the oxygen source, but maintains the same objection to the claims that the critical element of atomic oxygen 'cannot be materialized from nowhere but instead must be provided for in the reaction volume'."

Examiner repeats features that are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Accordingly, the rejection is believed appropriate and should be maintained, based upon well-established precedent.

Under the section entitled "ISSUE 3" beginning on p. 6, Appellant argues in pertinent part,

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“Appellant submits that the record to date fails to address Appellant's argument that the Bowen reference is inapplicable because of having a different temperature range than the claimed invention due to the fact that the non[-]specified temperature of the Bowen reference must be low enough to allow for plastic components. The Answer has not given a reason why it disagrees with Appellant's argument regarding the temperature range of Bowen. Since Bowen is inapplicable, the Answer's argument that Bowen proves the claimed pressure ranges are inoperable also fail.”

Examiner respectfully disagrees. Examiner expressly addressed the issue of *alleged* temperature differences at length. The discussion is repeated herein below from the Examiner's Answer at pp. 25-26.

“In this regard, Appellant argues that because Bowen is purportedly not heating the substrates to the same temperature as in the instant claims, that the Bowen reference is inapplicable as evidence that the instant claims fail to work in the presently claimed pressure range of 200 Torr to 760 Torr (1 atmosphere). Examiner respectfully disagrees. Bowen is very clear regarding the effect of temperature. Bowen states at col. 2, lines 54-60,

“**Homogeneous gas phase nucleation** is suppressed ... by reducing the kinetics by **decreasing the molecular collisions** between reaction product molecules (atoms).”  
(Emphasis added.)

“As pointed out in the basic chemistry textbook of Atkins and Jones, Chemical Principles, W. H. Freeman and Co.: New York, 1999, p. 617 (a reference provided to Appellant along with the Office action made final, filed 10 September 2003),

“The mean speed of the molecules **increases with temperature, so the collision rate increases too.**”  
(Emphasis added.)

“Therefore, higher temperatures **increase collision frequency** amongst molecules in the gas phase, and consequently **increase homogeneous reactions**, as taught above by Bowen, contrary to the instant claims which state,

“reactant gases in the reaction volume taking part in **heterogeneous** chemical reactions **rather than in homogeneous** reactions taking place in the chamber **outside of the reaction volume.**”

“With all of this evidence in mind, the Brief’s argument that higher substrate temperatures are used in the instant claims than in Bowen, only serves as further evidence that the instant claims are **not enabled at elevated temperatures** because elevated temperatures lead to homogeneous --rather than heterogeneous-- reactions in the reaction volume by increasing the number of collisions among the reactant gases. Depending upon the interpretation of the claim limitation, then, at the higher temperatures which Appellant has argued exist in the instant claims, either (1) the reaction volume becomes even more narrow at elevated temperature, making it even more difficult to illuminate only the region above the substrate surface, or (2) heterogeneous reactions will take place in the “reaction volume” contrary to the claim language.” (Emphasis in original.)

Accordingly, for Appellant to suggest that the temperature range issue had not been addressed in the Examiner’s Answer is to ignore the evidence of record.

Appellant then further argues in this regard,

“The Answer states that Appellant is mistaken in suggesting that MPEP 2141.02 requires that a reference must be taken as a whole, and suggests that the Bowen reference, taken as a whole, ‘provides evidence that the instant claim limitations, cannot simultaneously exists (sic) in the pressure range of 200 to 760 Torr’. Appellant submits that the Answer does not address the issue of the Bowen relating to a different temperature range (other than a general statement that the number of molecule in the system is fixed), and teaches a pressure range of 0.1 atmospheres to be ‘relatively high’ (see Bowen at column 9, lines 22-30). Thus, Bowen is different from both the pressures and temperatures of the claimed subject matter. Appellant submits that the Answer has not shown how a reference so removed from the specific temperature and pressure ranges of the claimed subject matter could be applicable for inherency and for obviousness.”

Examiner respectfully submits that Appellant is confusing the issue here. Bowen provides evidence that the instant claims will not work in a pressure range of greater than about 8 Torr. Of

course Bowen will not carry out the method in pressure ranges that Bowen know will not work. The issue is that Bowen --considered as a whole-- proves the instantly claimed method will not work. As noted above, Bowen further provides evidence that higher temperatures only exacerbate heterogeneous reactions between the gas and the surface by increasing homogeneous nucleation. Finally, Examiner maintains that the “as-a-whole” consideration is not proper for application to a reference providing proof because the proof may exist at only a portion of the reference. Evidence is evidence is evidence.

Finally in this regard, Appellant argues,

“Appellant disagrees with the assertion that Appellant's arguments are defective for ‘failing to address how the first paragraph of 35 U.S.C. 112 is complied with, including how the specification enables any person skilled in the art to make and use the subject matter’. Appellant submits that every issue raised by the Office in each of the Office Actions in this application have been fully responded to, and that the Office has largely asserted that the specified pressure ranges are inoperable.”

Again, Appellant fails to present evidence or any location in the specification as to how the instantly claimed method would work given the evidence of record that it will not. Merely stating that it would work is merely a conclusory observation.

Under the section entitles “ISSUE 4” beginning on p. 7, Appellant presents no additional arguments. Accordingly there exists nothing for Examiner to address.

Under the section entitles “ISSUE 6” beginning on p. 6, Appellant argues,

“The Answer states with regard to issue 6, that Appellant's brief ‘admits that Bowen heats the substrate and gases at page 10, last paragraph’. Appellant submits that the Board should read the entire paragraph which states ‘[H]owever, the heating referenced must be at very low

temperatures so as to be consistent with the preceding teachings of Bowen and avoid the melting of plastic', and thus the Answer's inference that the Bowen reference heats the substrate in a comparable way to the higher temperatures of the recited subject matter is incorrect and should be withdrawn."

Appellant's observation regarding the heating temperature is merely conclusory observation and is, in fact, in error. As evidence, US 2004/0063898 A1 (Nishinaka et al.) discloses production of a polyimide thin film using curing temperatures of 500 °C (paragraph [0080]). US 2004/0074338 A1 (Kuhn et al.) teaches heating a metal-coated polymer (i.e. plastic) substrate to 600 °C (Abstract). US 2004/0113227 A1 (Goto et al.) teaches the deposition of silicon dioxide and silicon nitride on substrates made from plastics of polyimide, polyetherketone, polyethersulfone, polyetherimide, polyethylenenaphthalate, and polyester resin substrates (paragraphs [0011], [0012], [0022]) at temperatures of 90 °C to 400 °C indicating the entire temperature range can be used for both glass and the aforementioned plastic substrate materials (paragraphs [0019], [0041], [0052]). In fact, the patent as well as non-patent literature is replete with the heating of plastics to temperatures well within the deposition range taught in the Roche and Hisamune references applied to reject the claims. Accordingly, Appellant's argument is wholly without merit for being factually in error that plastics require must somehow be maintained at temperatures lower than those deposition temperatures taught in both the Roche and Hisamune references. Again, this is merely a conclusory observation by Appellant that contradicts well-known facts regarding plastics.

Appellant then argues,

"Appellant submits that the suggested combination of references is unclear and that the asserted inherency of Bowen is unclear. It is believed that the disparate operating conditions of the various references clearly establish that there is no motivation to combine Bowen with

Roche and Hisamune absent use of Appellant's disclosure as a guide. The Answer asserts that the Roche and Bowen references show that the method will not operate in the claimed pressure region, but ignores that the Roche reference requires a 'laser light' to cause the reaction, and Bowen 'who teaches the same photo CVD method as Roche' requires 'irradiating the only (sic) region just above the substrate and keeping the pressure around 0.01 atm (7.6 Torr)'. Appellant submits that the present subject matter is different from the cited references at least because the 'process is different from photon-assisted CVD, where it is the substrate reaction surface on which photons are directed to increase reaction rates' (see page 7, lines 24-26 of the present specification), and because the pressures of the cited references are different from the claimed range of 200 Torr to 760 Torr."

As repeated from the Examiner's Answer, Bowen is **not** combined with Roche and Hisamune. Bowen is used for a **showing of inherency only**. Examiner respectfully disagrees that the combination of references is even remotely unclear, as demonstrated in the rejection of the claims. Light of a given wavelength will initiate the excitation of O<sub>3</sub> regardless of whether it comes from a laser or a lamp because electronic excitation of a given atom or molecule is a characteristic property of the atom or molecule. It is the wavelength of light --not the light source producing said wavelength-- that is critical here. Accordingly, all three references of Roche, Hisamune, and Bowen are drawn to photo CVD, regardless of Appellant's attempts to suggest otherwise, and therefore are each drawn to the same endeavor of photo CVD. The combination is believed proper.

Furthermore, Examiner does not ignore the use of a laser in Roche. A laser is the only manner in which homogeneous nucleation can be avoided, as shown in Bowen. In the instant case, even a laser cannot prevent homogeneous nucleation from occurring in the pressure range presently claimed of 200 Torr to 760 Torr, as proven by Bowen.

Appellant's notion that "the present subject matter is different from the cited references at least because the 'process is different from photon-assisted CVD, where it is the substrate reaction surface on which photons are directed to increase reaction rates' (see page 7, lines 24-26 of the present specification)" is in error. **The instant claims exclude exposure of the substrate to light**, stating specifically, "illuminating the reaction volume of gas from a high intensity light source **without** illuminating the substrate." (Emphasis added.) Similarly, Roche and Bowen do **not** expose the surface of the substrate to light. Accordingly, the applied references are not different from the instantly claimed subject matter.

Under the section entitled "ISSUE 7" beginning on p. 8, Appellant argues,

"The Answer states with regard to issue 7, that the "arguments provided in the Brief fail to teach why one of ordinary skill would not use a notoriously well known carrier gas, helium (He), used as in the photo-assisted CVD method of Takabayashi, as the carrier gas in Roche'."

"Appellant responded to the cited Takabayashi reference as having to do with formation of amorphous silicon, which is outside the claimed subject matter. Appellant further noted that the Takabayashi reference teaches a temperature that is 'in general . . . between 30° C and 450° C', which also lies outside the claimed subject matter. Thus the suggested combination of Roche with Takabayashi has an inappropriate use of temperature that teaches away from the claimed subject matter. Takabayashi also relates to a pressure that is referred to as 'vacuum' and specified as  $1 \times 10^{-2}$  to  $1 \times 10^2$  Torr, which pressure lies outside the claimed subject matter having 200 Torr to 760 Torr."

Examiner respectfully submits that Appellant fails to understand that which a teaching away is. A 30 °C temperature difference (versus 480 °C) can hardly be considered a significant difference, much less a teaching away. A carrier gas is a carrier gas. There are only a very few **inert** gases that exist which can be used as carriers, helium (chemical symbol "He") being one of the most

well known and widely available, commercially in high enough purity for the semiconductor fabrication. There is simply no reason why one of ordinary skill would fail to use a notoriously well-known carrier gas such as He in light of the teaching in Takabayashi that it is used in a photo-CVD process of a silicon-containing layer, just as in Roche, albeit a different silicon-containing layer. The difference between materials is in no manner a teaching away from the use of a notoriously well-known inert carrier gas used to carry the precursors to the deposition chamber.

Under the section entitled "ISSUE 8" beginning on p. 9, Appellant argues,

"The Answer states with regard to issue 8, that claim 36 is unobvious, asserts that the 'Brief again incorrectly suggests that Bowen is used for something other than inherency'."

"Appellant respectfully submits that the rejection is unclear and that a reference which teaches away from recited subject matter is an improper reference for obviousness and for inherency. Additionally, Sato has many deficiencies that cannot be reconciled by combining any of Roche, Hisanume, and Bowen. One deficiency is that Sato's temperatures are uniformly below the recited subject matter. Thus, there is no motivation to combine Sato with Roche, Hisanume, and Bowen."

For reasons already of record, there exists no teaching away in the references applied to reject the claims --not from each other and not from the instant claims. Whether or not the temperatures of Sato are near or far from the claimed subject matter is irrelevant for the combination with Roche and Hisamune to be proper or improper.

Under the section entitled "ISSUE 9" beginning on p. 9, Appellant argues,

"The Answer states again that Appellant uses the Bowen reference 'for something other than inherency'."

“Appellant's Appeal Brief references the Office Action and the Imai reference, with the Bowen reference only being noted as part of the rejection. The Imai reference is noted to be primarily concerned with oxide reflow processes after the CVD process. Imai's CVD process is noted to be carried out at a temperature of about 350° C, which temperature tends to teach away from Imai's representation of a ‘conventional deposition’ of ‘somewhere between 350 and 450 °C.’ Appellant submits that the Appeal Brief does not use the Bowen reference improperly.”

To the extent that the Appeal Brief and Reply Brief suggest that Bowen is used for anything other than a showing of inherency, the Appeal Brief and Reply Brief are in error.

This addresses each of Appellant's arguments in the Reply Brief.

### *Conclusion*


3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik Kielin whose telephone number is 571-272-1693. The examiner can normally be reached on 9:00 - 19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Erik Kielin  
Primary Examiner  
January 21, 2005